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# GROUTING CONCRETE JBSR 1000/3




## Product description

Fescon Grouting concrete JBSR 1000/3 is a high-strength, salt and frost resistant special concrete with sulphate resistant cement as binding agent. Due to its slight swelling before binding, it fills the casting space effectively. Applications include demanding precision castings, narrow-space and difficult post-work and filling castings, installation and sealing castings of concrete elements and anchoring solders. The strength class C 60/75 according to concrete standard SFS EN 206-1. The maximum grain size of the product is 4.0 mm.

- Self-compacting
- For layer thicknesses of 30 to 100mm
- High protection against steel corrosion
- Excellent casting properties (pliable, high mobility)
- Good adhesion properties
- Low shrinkage during drying
- Frost resistant
- Can be pumped

*Minimum delivery batch is 3 big bags.*

## Applications

- Anchoring solders
- Machine beds
- Soldering castings for pillars
- Sealing and post-casting of elements
- Injection castings

**The product is listed in the portal for building products that can be used in Nordic Swan Ecolabelled buildings.**

## Instructions

# Base

- The temperature of the base should be +5°C...+25°C.
- The product is cast onto a concrete base.
- The base must be clean, solid, dust-free and absorbent.
- Loose layers, cement glue and other impurities have been mechanically removed to ensure adhesion between the product and the base. Coarse surface produces best adhesion.

# Priming

- The concrete base is wetted with water to matte moistness. There must be no loose water. Starting the wetting the day before installation is recommended so that the water is absorbed deep enough into the base.

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- The concrete base must be sufficiently moist to prevent water in the product from being absorbed into the base too quickly.
- Additional liquid adhesion promoters should not be used.

## Mixing and application

- The workspace must be protected from strong wind, sunlight and rain.
- During casting and product hardening, the temperature should be +5°C...+25°C.
- The product is mixed into a smooth mass with a pipe or paddle mixer. When using a paddle mixer, the mixing time is 1 to 3 minutes. When mixing with a mortar mixer or concrete mixer, the mixing time is approximately 5 minutes.
- The amount of water must be in accordance with the instructions on the product card. Deviating from the recommended amount of water weakens the product's strength values, increases the risk of separation and affects the development of strength and reduces workability.
- The working time is roughly 1 hour from the mixing.
- The product can be applied by pumping or manually onto the base. The casting must be carried out as soon as possible after mixing of the mass, thus making full use of the swelling of the fresh mass. The mass is pliable and no sealing is required. If necessary, casting flow can be enhanced by ramming or vibrating very lightly. When making thick casting layers (more than 100 mm), it is advisable to cast with several layers. Each layer must be allowed to harden for at least 24 hours before the next casting.
- The casting mould must be tight, since soldering concrete is very pliable and highly mobile. Normal castings can be done from one side. Build the mould for this side higher and wider so that the soldering concrete can fill the casting space under its own weight.
- Wash the tools with water immediately after the work has been completed.

## Aftercare

- Sufficient moisture of the installed product must be ensured during the curing phase so that the curing reaction works correctly and the desired strength is achieved.
- The surface of the installed product must be kept moist for 7 days. Depending on the conditions and work site, moistening can be done either with water spray, plastic film, or with Fescon aftercare material.
- Especially in the spring, aftercare should be started immediately and carried out carefully, since in the spring the relative humidity of the air is often less than 40% RH. Low relative humidity combined with sunlight and wind dries the surface very quickly.

## Other considerations

- In anchoring solder castings, the drill hole must be 40 mm larger than the piece to be fixed.

### Waste handling

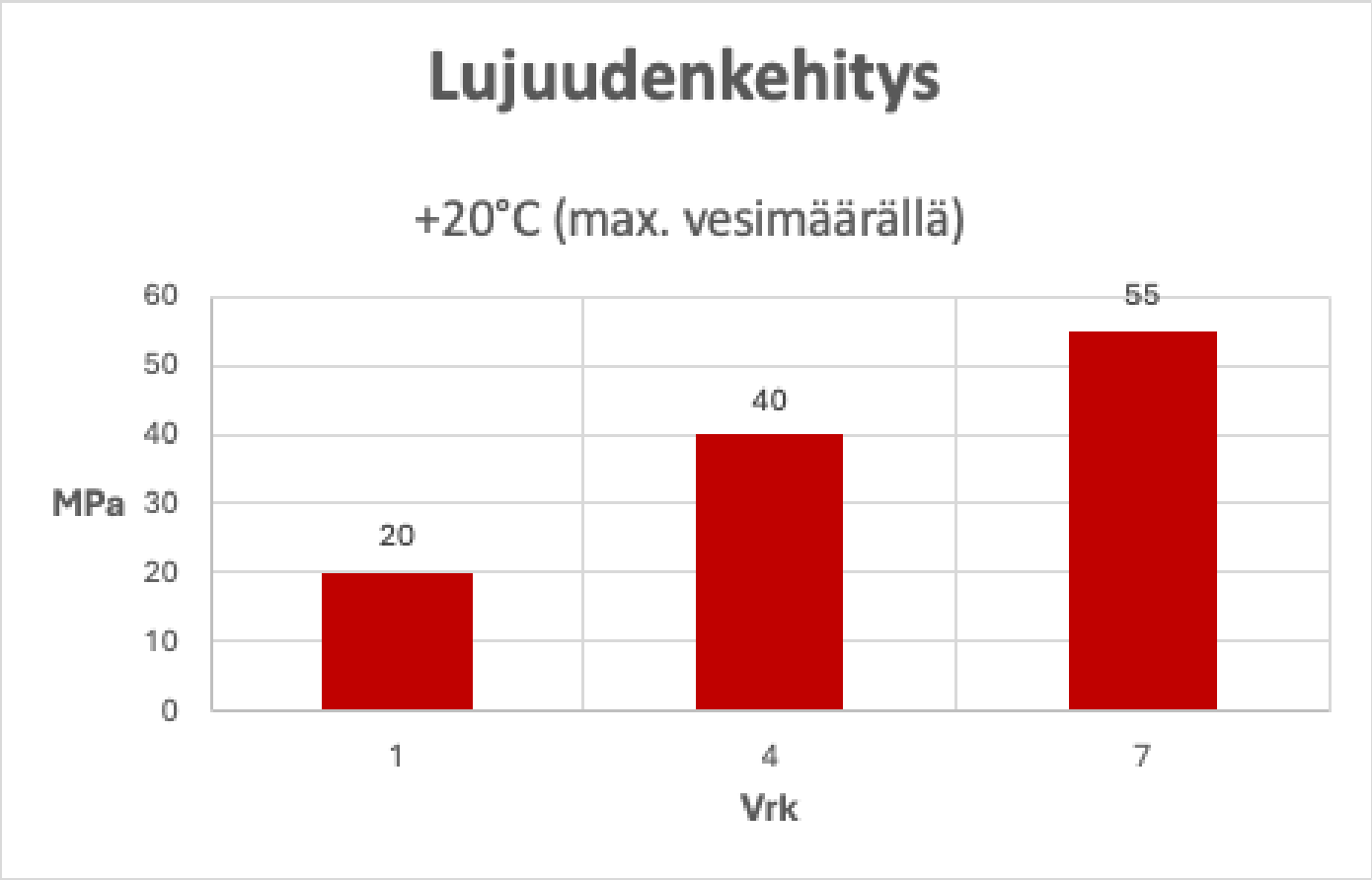
Storage and handling of waste
See the separate storage and disposal instructions https://www.fescon.fi/en/material-bank

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# Technical information

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|---|---|
| **Material usage** | Approx 2.0 kg/m$^2$/mm |
| **Water requirement** | 2.3 – 2.4 l / 25 kg |
| **Finished compound** | Approx. 500 l / 1000 kg |
| **Type** | Powder |
| **Binder** | Sulphate resistant cement |
| **Colour** | Grey |
| **Maximum grain size** | 4 mm |
| **Package size** | 1000 kg |
| **Storage** | Storage time in a dry location approx. 1 year |
| **Density** | Approx. 2100 kg / m$^3$ |
| **Layer thickness** | 30 – 100 mm |
| **Fibre** | Not fiber reinforced |
| **Additives** | Additives to improve weather resistance, pumpability and workability |
| **Usage temperature** | +5°C...+25°C |
| **Workability time** | Approx. 1 h |
| **Walkable** | Approx. 8 h |
| **Strength class** | C60/75 (R4, EN 1504-3) |
| **Adhesion strength** | > 1,5 MPa (R4, EN 1504-3) |
| **Reaction to fire** | A1 |
| **Exposure class** | XC4, XS3, XD3, XA3, XF4 (50 v), XC4, XS3, XD3, XA3 (100 years) |
| **Frost resistance** | Frost-resistant, for indoor and outdoor use |
| **Waterproofness** | Water-resistant |

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Limitation of liability, product use notes and restrictions: Please familiarize yourself with Fescon Oy's general terms of delivery and the design and work instructions related to the product.